

6 a connector coupled to the plunger below the top end, wherein the connector is  
7 configured to permit fluids to be moved upwardly through the connector and the plunger upon  
8 each downstroke of the plunger, and wherein the plunger has an interior that is generally open  
9 from the top end to the connector; and

10 a rod coupled to the connector, wherein the rod is translatable to reciprocate the  
11 plunger within the pump barrel using an upstroke and a downstroke, and wherein the top end  
12 of the plunger is adapted to direct particulate into the plunger and away from the pump barrel  
13 upon each upstroke, and wherein the generally open interior permits fluids passing through the  
14 connector to travel up through the plunger and out the open top end to expel particulate from  
15 the plunger upon each downstroke so that essentially no particulate accumulates on the  
16 connector.

1 2. (As filed) A system as in claim 1, wherein the top end of cylinder is  
2 inwardly tapered, and wherein the connector is disposed within the cylinder.

1 3. (As filed) A system as in claim 1, wherein the connector has at least one  
2 through hole to permit fluids to be moved upwardly through the connector and the plunger  
3 upon each downstroke of the plunger.

1 4. (As filed) A system as in claim 1, wherein the pump barrel has a bottom  
2 end and a standing valve in the bottom end.

1 5. (Amended) A method for pumping fluids from the ground, the method  
2 comprising:

3 placing a pumping system into the ground, wherein the pumping system  
4 comprises a pump barrel, a plunger reciprocatably positioned within the pump barrel, wherein  
5 the plunger has an open top end with a sharpened edge, a bottom end, and a traveling valve at  
6 the bottom end, and a connector coupled to the plunger below the top end, wherein the plunger  
7 has an interior that is generally open from the top end to the connector; and

8 reciprocating the plunger within the pump barrel with an upstroke and a  
9 downstroke, and directing particulate into the plunger through the open top end and away from  
10 the pump barrel upon each upstroke and expelling particulate from the open top end of the  
11 plunger using fluids passing upwardly through the connector and the pump barrel upon each  
12 downstroke so that essentially no particulate accumulates on the connector.

1           6. (As filed) A method as in claim 5, wherein the plunger comprises a  
2 cylinder having an inwardly tapered open top end to direct particulate into the cylinder upon  
3 each upstroke.

1           7. (As filed) A method as in claim 5, wherein the plunger has a traveling  
2 valve at the bottom end, wherein the pump barrel has a standing valve at a bottom end such  
3 that fluids are drawn into the pump barrel through the standing valve upon each upstroke and  
4 are forced through the traveling valve upon each downstroke.

1           8. (As filed) A method as in claim 5, wherein the connector has a through  
2 hole such that fluids passing through the traveling valve move through the through hole and  
3 upwardly through the plunger.

1           9. (New) A pumping system comprising:  
2 a pump barrel that is adapted to be placed into a well casing;  
3 a plunger reciprocatably positioned within the pump barrel, wherein the plunger  
4 has an open top end with a sharpened edge, a bottom end, and a traveling valve at the bottom  
5 end, wherein the plunger has a tight fit with the pump barrel to prevent particulate from  
6 accumulating between the plunger and the pump barrel;  
7 a connector coupled to the plunger below the top end, wherein the connector is  
8 configured to permit fluids to be moved upwardly through the connector and the plunger upon  
9 each downstroke of the plunger, and wherein the plunger has an interior that is generally open  
10 from the top end to the connector; and  
11 a rod coupled to the connector, wherein the rod is translatable to reciprocate the  
12 plunger within the pump barrel using an upstroke and a downstroke, and wherein the top end  
13 of the plunger is adapted to direct particulate into the plunger and away from the pump barrel  
14 upon each upstroke, and wherein the generally open interior permits fluids passing through the  
15 connector to travel up through the plunger and out the open top end to expel particulate from  
16 the plunger upon each downstroke so that essentially no particulate accumulates on the  
17 connector.

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